CIEMS Solutions

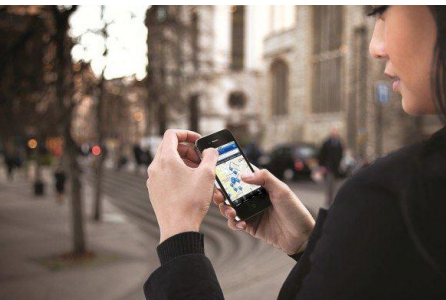## Community Information, Event Management and Safety.

Event Management, Information and Safety Solutions

The CIEMS Solution is developed as a collaborative project, based on community involvement, asset utilisation and Public Private Partnerships. The project builds on ICT infrastructure investment by local government by integrating existing services and infrastructure provided by both public and private organisations in the community.

The CIEMS project focuses on the application of WiFi connectivity to deliver information to the community as a whole and providing an ICT platform over which a range of services can be delivered; making the task of deploying and managing a diverse wired and wireless network achievable and economically viable for local government, tourism and private organisations. Services supported through CIEMS Solutions are diverse and encompass:

- Hospitality and Accommodation providers
- Tourism Information and Visitor services
- Retail and Marketing applications
- Event Information and access solutions
- Private Broadcasting and Webcasting of major events
- Public Safety and CCTV monitoring

The marketing and promotional services offered via the WiFi network are almost limitless in opportunity and application. Commercialisation of the network is possible for long term sustainability of the network and can assist the community through appropriate application in helping rejuvenate older or stressed community areas.

BIT.C
Business IT & Communications

A collaborative and comprehensive wireless management solution for local government, communities and private organisations.

WiFi Information Network Development

The key requirement of a Community WiFi Information Network is for a well designed high capacity distribution network with a flexible and manageable delivery platform. The management platform will provide and control user access to the network and deliver the range of information services and other applications to the community stakeholders and users. The network design will determine success in meeting the demands of data transmission speed, reliability and reach needed to encompass community precincts and event venues and satisfy the increasing bandwidth demands of mobile Smart devices.

The challenge in identifying a solution that provides the best management systems and equipment whilst maintaining cost effective delivery and value is in the effective collaborative between community stakeholders. The CIEMS partnership approach bringing community stakeholders and organisations together allows better asset utilisation and leverages the investment all stakeholders have made individually by unifying the disparate systems into a broad reaching communications network.

Innovative and interactive information delivery platforms, task management, asset tracking and location services are made possible over wide areas of the community. Tourism along with Retail operators will also benefit greatly through marketing and promotional opportunities which can commercialise the network and assist in developing services to meet the needs of the Community.

Hospitality and Accommodation

Accommodation providers have been providing wireless Internet services for many years, however the standard of operation of these services have often been less than satisfactory. The traditional WiFi model for hotel and accommodation providers has come to an end. Travellers now expect a premium service delivering wireless access at high speed throughout the precincts they are frequenting and also expect that it should be free of cost.

The challenge here is to create an environment in which providers can offer Free Access but at the same time retain revenue earning capacity and more importantly allow this Internet and Information service to become a revenue generating communications network.

The collaborative approach on which the CIEMS project is based can help deliver these WiFi solutions to providers by creating a unified communications network providing freely available community, tourism and local services information while maintaining the individual branding for these providers over a shared network.

The CIEMS solution provides a more engaging WiFi service for guests and patrons allowing users to connect and interact over Smart hand held device to access information about the local environment and the Internet ubiquitously throughout the Community Info Network.

The Information Portal used to create this environment leverages information and service listings from the accommodation providers themselves and develops relationships with complimentary third party service providers who could become potential advertisers.

CIEMS Solutions
Community Information, Event Management and Safety.

Tourism Information Networks

A core role of local tourism authorities is information delivery. In developing the Community WiFi Network the Local Tourist Authority and its members will be able to provide up-to-date and geographically specific information to visitors and local residents.

Tourists are now actively searching out WiFi access to seek information on the area and its attractions and maintain contact with home whilst they are travelling. Free WiFi access is expected to be available in tourist precincts and transport hubs by international travellers and increasingly now by Australian travellers and locals.

The ability of any Local Tourist Authority to deliver relevant information and the attraction of Free WiFi Internet services are key success factors for any progressive region. The range of applications for information delivery, marketing and promotion, as well as for market intelligence data collection, is almost limitless. What is required however for delivery, is for a robust and ubiquitous public WiFi network to be enabled.

Promotional and marketing opportunities delivered from the WiFi Information network can be tailored to individual sites and precincts where the information is needed. This even includes remote sites where stand alone solar powered access points are deployed to provide relevant tourism and site specific information. The CIEMS project develops, builds and manages these high capacity communications networks to carry this data delivery task.

Many Councils are recognising the importance of tourism to their local economies and are working with LTAs to develop Visitor Information Centres in key locations. A WiFi Information Network supports these initiatives and can put a virtual VIC within reach of any tourist or visitor wherever they are located via their mobile WiFi device.

Some of the applications and functions of a Tourist WiFi Information Network are listed below:

- Accurate up to date Tourist Guides and Information
- Tourism destinations and Google Maps links
- Information on tourist trails and historical records
- Downloadable self guided and adventure tours
- Smartphone and Web Applications
- Internet access to Social Media sites
- Intelligent interactivity using QR Codes and NFC
- Location specific information with Rich Media Content
- Uploading photos or video from *GoPro* style cameras
- Remote site solar powered information portals
- Local event diaries and bookings
- Hospitality and accommodation information
- Booking systems for tourism businesses
- Local weather conditions
- Emergency warnings and information
- Community, health and other services and locations

As tourist precincts often cover wide areas and cross local government boundaries the capacity of the local WiFi network to be joined with other community or LTA networks is a major advantage of the CIEMS Solution.

The central management of user authentication and access allows CIEMS to facilitate inter-network connections which adds value to the demographic and geospatial information being generated for the network stakeholders. This approach also enables applications such as bookings and reservations, trip maps and precinct wide promotions to be provided on a consistent basis over a broad WiFi Information Network.

BIT.C
Business IT & Communications

The key requirements for a WiFi Communications Network are a well designed high capacity network with a flexible and manageable delivery platform.

Event Management Solutions

To assist local government, event organisers and local clubs or other organisations, Event Management Systems can be integrated into the Communications Network established though a CIEMS project. This helps to positioning the community as a destination which can support major events by providing the infrastructure that organisers are looking for within an event space.

The use of the latest technologies embedded into Smartphones utilising Barcodes and QR Codes, NFC and RFID tagging, enables sophisticated ticketing solutions for venue or event access to be implemented. Offering ready-made solutions including interactive voice communication (VoIP), electronic entry and access authorisation, RFID wrist bands and ID Passes through NFC identification, booking and ticketing systems, prospective event organisers can obtain a real advantage in attracting and managing major events.

In conjunction with the Safety Systems offered by the ICT network many different and varied event access and public safety issues can be addressed through these solutions. For example, the use of CCTV cameras can allow safety and crowd control to be enhanced through the digital analysis of video recordings. Head counting in night clubs and major venues using CCTV or NFC allows enforcement of venue and room capacity on a consistent basis in real time rather than the usual costly periodic inspections by the local Police forces.

As part of the collaborative approach to the development of a Community WiFi Network, CIEMS works with application providers to bring a tailored solution to local government and event organisers enabling solutions for event management and asset protection as well as personal safety.

Webcasting

Providing real time event information and video streaming can provide event participants and spectators with a far greater level of engagement with the event. The development of a wireless network in major tourist and event areas enables Rich Media Content and RSS news and blog feeds to be delivered locally to users within these service areas containing vital information and streaming video content.

Where events are being recorded for private use or public broadcasting, the Community WiFi network can be utilised to both capture these images and through a local web server transmit these images privately to users on the local wireless network, or webcast through the Internet depending on the broadcast rights of the organisers and the nature of the event.

There are many businesses in the region that are able to provide the recording and broadcasting of events. What they lack is the ability to deliver this media content in real time to spectators and participants. The infrastructure built to enable a Community WiFi Network now makes this possible, greatly enhancing the regions ability to attract and keep major events within their community.

CIEMS Solutions
Community Information, Event Management and Safety.

Retail and Marketing Solutions

CIEMS solutions enables a full range of promotional activities and marketing opportunities to retail, hospitality and other business or service providers wishing to promote themselves. This is a core component for the commercialisation of the wireless information network and the platform to generate ongoing income to support the operational costs and network expansion.

Collection of user activity and geospatial information is a key by-product of the Information Network. The value this market intelligence brings for infrastructure planning in the tourism and retail sectors is very high. Informed decision making is greatly enhanced by accurate demographic data and user activity tracking which is provided through the Information Network Management Systems used by CIEMS and drives development of infrastructure and services by identifying where and how people spend their time within these precincts.

CIEMS Marketing Solutions will provide new revenue opportunities through marketing initiatives and promotions over the Information Network. Innovations in marketing utilising QRCode NFC, POS signage, location specific offers, interactive coupon offers, etc. along with geospatial information mapping are possible over this network.

CIEMS works with specialist marketing and web design companies to help deliver sophisticated advertising campaigns over the digital WiFi network which can assist businesses in brand building, direct sales and online shopping. There are endless possibilities in designing marketing campaigns and with the saturation of the market with Smart device a WiFi Information Network will become an essential tool for any marketer.

Safety Camera Systems

Integration with the WiFi Information Network over wireless and wired networks is a key driver for overall community network development. Community safety and policing initiatives can be supported by such a unified Communications Network enabling the rollout of CCTV systems in central activity areas and at risk sites such as nightlife precincts and community malls.

Working with local security firms the Communications Network is developed to service CCTV locations which integrate with WiFi Access Points and wireline services providing the opportunity for central monitoring and surveillance.

Infrastructure and operating costs can be significantly reduced through this unified secure communications network. The use of intelligent cameras and analytic software can assist policing and security by providing a self monitored solution. This can also be useful in providing event and venue managers with valuable intelligence on resource requirements.

There are however, many aspects of security monitoring that communities are fearful of; Privacy is at the centre these concerns, with the use of ICT security and encryption protocols these wireless networks can be made more secure than traditional telephone based systems. Procedures for secure recording and retrieval of this information are possible through the tight security protocols the CIEMS DuxCommander system supports.

BIT.C

Business IT & Communications

CIEMS - A collaborative and comprehensive information and management solution for local communities.

What is it?

The CIEMS project utilises communication networks based on global WiFi Internet standards to establish interactive communication between all members of the community and visitors over Smart handheld portable WiFi enabled devices.

Why do we need CIEMS?

The applications for WiFi enabled Smartphones and Tablets are growing globally. Mobile web browsing will become increasingly important with people calling for easy access to information on demand with high speed reliable access.

Who is involved?

CIEMS is a project based solutions group which brings together the different stakeholders within a community and services providers to deliver a range of Information and Management applications.

How does it work?

The CIEMS project focuses on the application of WiFi connectivity to deliver information to the community as a whole and provide an ICT platform over which the range of services required can be delivered.

By developing the core infrastructure needed in establishing a unified WiFi network accessible by the community, investment in network equipment and integration with existing infrastructure enables the information portal ubiquitous coverage over large areas of the community.

What are the Benefits?

Cost Saving

Accuracy and timeliness of information delivery, cost savings by eliminating excessive printed information and the value in analytic user information will enhance service delivery to the broader community.

High Asset Utilisation

The integration and sharing of ICT resources developed by both private and government sectors in a unified network will be a major outcome for this project. The establishment of a platform and protocols that allow higher levels of shared ICT asset utilisation and reach will assist individual organisations and community members through the provision of ubiquitous and cost effective digital communications.

Increased Economic Activity

Economic activity will be increased through the attraction that the infrastructure has to event organisers, promoters and marketing organisations. An effective and efficient communications network is a significant factor in organisers' venue choice. Hosting of events from community markets or conferences to major national and international events can greatly influence the economic strength of any city.

Improved Public Safety

Increased Safety and Security for communities and physical assets will also be possible through the integration of CCTV and global positioning systems which provide real time and recorded monitoring of facilities and community open spaces.

Social Media Communications

Initiatives utilising social media applications and interactive communications access along with the development of micro business and community networking opportunities will foster a greater sense of belonging and cooperation within community groups.

CIEMS Solutions

Community Information, Event Management and Safety.